Appendix B, Chapter 5
Fisher

5.0 Fisher (Martes pennanti)

The fisher (*Martes pennanti*) is a Washington state endangered species and a federal species of concern. The Wind River subbasin is part of the historical range of the fisher (Figure 5-1). Overtrapping, and loss and alteration of habitats are considered the most significant reasons for the decline of fishers in Washington. Although extensive surveys for fishers have been conducted throughout their historical range, no known population of fishers exists in Washington. The apparent absence of fishers in Washington represents a significant gap (i.e., lack of population continuity) in the species range from Canada to Oregon and California. Riparian habitats, especially those with large diameter snags, live trees and downed logs, are considered high quality habitats for fishers, especially for resting and reproduction. Loss and fragmentation of these habitats can limit the suitability of a landscape for fishers. Oregon now has a resident population of fishers in the Cascades that could serve as a source population for Washington. However, the Bonneville Dam makes the Columbia River a more formidable barrier for fisher dispersal from Oregon to Washington.

Fishers historically occurred throughout much of the forested areas of Washington, though they were not particularly abundant. The fisher was over-trapped in the 19th and early 20th centuries. Trapping, predator and pest control programs, and loss and alteration of habitat combined to push the fisher to near extirpation. Despite protection from legal harvest for 64 years, the fisher has not recovered. The fisher population may have been kept from recovering by a combination of factors. These factors likely include: a reduction in quality and quantity of habitat due to development and logging; past predator and pest control programs; low inherent reproductive capacity of the species; and demographic and genetic effects of small population size.

Fisher biology is characterized by low population density and a low reproductive rate. They have large home ranges and generally avoid large openings, which suggests that viable populations would require large areas of relatively contiguous habitat. Throughout their range, fishers are generally associated with late-successional coniferous and mixed coniferous-

deciduous forest (Table 5-1). In western Washington, fishers may have been restricted by frequent soft snows or deep snow packs to elevations below 1800 m. Forests with high canopy closure, multiple canopies, shrubs, and that support a diverse prey base are most used. Large diameter trees, large snags, tree cavities, and logs are most often used for den and rest sites, and are an important component of suitable habitat.

Currently, the fisher is very rare in Washington. Infrequent sighting reports and incidental captures indicate that a small number may still be present. However, despite extensive surveys, no one has been able to confirm the existence of a population in the state. The lack of detections of fishers given the extensive carnivore surveys conducted since 1990, an average of less than four fisher sightings per year since 1980, and few incidental captures by trappers, all indicate that fishers are very rare in Washington and could become completely extirpated. We believe that any remaining fishers in Washington are unlikely to represent a viable population, and without a recovery program that includes reintroductions, the species is likely to be extirpated from the state.

Figure 5-1. Distribution of fisher in Washington.

Table 5-1. Fisher association with wildlife habitats in the Wind River subbasin (IBIS 2004).

Wildlife-Habitat Type	Association	Habitat Requisite	Data Confidence	Comments
Mesic Lowlands Conifer-Hardwood Forest	Closely Associated	Feeds and Breeds	Moderate	none
Montane Mixed Conifer Forest	Closely Associated	Feeds and Breeds	Moderate	none
Interior Mixed Conifer Forest	Closely Associated	Feeds and Breeds	Moderate	none
Lodgepole Pine Forest and Woodlands	Unsure	Unsure	Low	none
Montane Coniferous Wetlands	Generally Associated	Feeds and Breeds	Low	none